

1998/N005

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a.m.

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Patent Claims

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1. A multilayer, biaxially oriented polypropylene film comprising a base layer and at least one heat-sealable top layer and at least one interlayer in accordance with a BZD layer structure, which film comprises wax in its interlayer, wherein the interlayer comprises a wax having a mean molecular weight M_n of from 200 to 1200.

10 2. A polypropylene film as claimed in claim 1, wherein the interlayer comprises wax in an amount of from 3 to 40% by weight, preferably from 5 to 30% by weight, based on the weight of the interlayer.

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3. A polypropylene film as claimed in claim 1 and/or 2, wherein the wax is a polyethylene wax having an M_w/M_n of from 1 to 2.

20 4. A polypropylene film as claimed in one or more of claims 1 to 3, wherein the wax is a macrocrystalline paraffin (paraffin wax) or a microcrystalline paraffin (microwax).

5. A polypropylene film as claimed in one or more of claims 1 to 4, wherein the interlayer has a thickness of from 0.2 to 10 μm , preferably from 0.4 to 5 μm .

25 6. A polypropylene film as claimed in one or more of claims 1 to 5, wherein the interlayer comprises a highly isotactic propylene homopolymer having a chain isotacticity index of the n-heptane-insoluble content, determined by $^{13}\text{C-NMR}$ spectroscopy, of at least 95%, preferably from 96 to 99%.

7. A polypropylene film as claimed in one or more of claims 1 to 6, which has a heat-sealable top layer of olefinic polymers on both sides.

8. A polypropylene film as claimed in one or more of claims 1 to 7, wherein
wax-containing interlayers of olefinic polymers, preferably propylene homopolymer,
are applied on both sides between the base layer and the interlayer(s).

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9. A polypropylene film as claimed in one or more of claims 1 to 8, which
has a matt top layer.

10. A polypropylene film as claimed in one or more of claims 1 to 9, wherein
the base layer comprises a highly isotactic propylene homopolymer having a chain
isotacticity index of the n-heptane-insoluble content, determined by ¹³C-NMR
spectroscopy, of at least 95%, preferably from 96 to 99%.

11. A polypropylene film as claimed in one or more of claims 1 to 10,
15 wherein the base layer comprises a hydrocarbon resin in an amount of from 1 to
20% by weight, based on the weight of the base layer.

12. A polypropylene film as claimed in one or more of claims 1 to 11,
wherein the base layer comprises an antistatic, preferably a tertiary aliphatic
20 amine.

13. A polypropylene film as claimed in one or more of claims 1 to 12,
wherein the film is transparent and has a thickness of from 4 to 80 µm.

25 14. A polypropylene film as claimed in one or more of claims 1 to 12,
wherein the film is opaque and/or white and has a light transparency of at most
70%.

30 15. A polypropylene film as claimed in claim 14, wherein the film has a
vacuole-free interlayer.

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16. A polypropylene film as claimed in one or more of claims 1 to 15, wherein the top layer(s) comprise(s) lubricants, preferably polydimethylsiloxane, and antiblocking agents, preferably SiO_2 .

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17. A polypropylene film as claimed in one or more of claims 1 to 16, wherein all layers of the film comprise neutralizer and stabilizer.

18. A process for the production of a polypropylene film as claimed in claim 1, wherein the orientation in the longitudinal direction is carried out with a longitudinal stretching ratio of from 5:1 to 9:1 and the orientation in the transverse direction is carried out with a transverse stretching ratio of from 5:1 to 10:1.

19. The use of a polypropylene film as claimed in one or more of claims 1 to 17 as a packaging film, preferably as a cigarette wrapping film.

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